

# EXHIBIT 12

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UNITED STATES DISTRICT COURT  
NORTHERN DISTRICT OF ILLINOIS

MISH INTERNATIONAL :  
MONETARY INC., on :  
behalf of itself and :  
all others similarly :  
situated, :  
Plaintiff, : CASE NO.  
: 1:20-cv-04577  
V. :  
:  
VEGA CAPITAL LONDON, :  
LTD., et al. :  
Defendant. :

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HIGHLY CONFIDENTIAL  
VIDEOTAPED / REALTIMED DEPOSITION OF  
STEPHEN CRAIG PIRRONG, Ph.D.  
MAY 15, 2024  
VOLUME 2

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STENOGRAPHICALLY REPORTED BY:  
PAT ENGLISH-ARREDONDO, CSR(TX), CRR, RMR, CLR  
TEXAS CSR NO.: 3828  
JOB NO: 2024-938967

1 form.

2 Q. (By Mr. Taylor) Why do you  
3 think the number of buy orders didn't  
4 increase as the price of May contract  
5 continued to drop throughout the day?

6 A. So you're asking me to  
7 speculate, in essence. But basically order  
8 imbalance indicates that there is more  
9 negative private information than positive  
10 private information.

11 So the standard economist's  
12 interpretation, financial economist's  
13 interpretation of this order imbalance, is  
14 that it would reflect, you know, with the  
15 exception of the imbalance contributed by the  
16 Vega defendants, that would reflect  
17 negative -- you know, adverse, bearish  
18 private information.

19 Q. Sell order imbalances could  
20 also result from a cratering in demand, can't  
21 they?

22 A. No. Not necessarily, no.

23 Q. What do you mean, "not  
24 necessarily"? Would a sell order imbalance  
25 indicate high demand?

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1 familiar with a company called Vitol, Inc.?

2 A. Vitol, yes.

3 Q. Vitol. Thank you. I always  
4 mispronounce it.

5 Are you aware of whether Vitol  
6 is -- are you aware that Vitol is the world's  
7 largest independent oil trader?

8 A. Yes.

9 Q. Do you know anything about  
10 Vitol's trading strategy on April 20, 2020?

11 A. Not specifically. I don't know  
12 whether they are the one -- one of the ones  
13 that have been unmasked. If they have been,  
14 I haven't analyzed it yet.

15 Q. Do you know if Vitol had access  
16 to any storage that day?

17 A. I don't know what Vitol's  
18 contractual storage position was at Cushing,  
19 so -- and so -- and you're talking about  
20 storage generally.

21 I know that Vitol has storage  
22 assets around the world -- for example, in  
23 Rotterdam and other places -- but I don't  
24 know about Cushing specifically.

25 Q. So some traders, it sounds

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1 like, have contractual storage arrangements  
2 at Cushing. Correct?

3 A. There are potential for  
4 contractual storage arrangements at Cushing,  
5 yes.

6 Q. But other traders may not have  
7 contractual arrangements. Is that correct?

8 A. Some may, some may not.

9 Q. Do you know if Vitol employed a  
10 chief economist?

11 A. Yes, I'm aware of that, yes.

12 Q. Is that common for large  
13 traders?

14 A. Yes.

15 Q. And if I ask you about any  
16 other large traders, like BP or Shell, would  
17 you have any personal knowledge of how or why  
18 any of those traders traded that day?

19 MR. McGRATH: Object to the  
20 form.

21 A. No, I do not under- -- I do not  
22 have knowledge of their intent in terms of  
23 how they were trading.

24 Q. (By Mr. Taylor) Do you have  
25 any understanding of whether large oil

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1 traders, let's say like Shell or BP, have  
2 regular contact with the CME?

3 A. Yes. Well, so I think, you  
4 know, BP in particular, I think, has its own  
5 clearing operation and its own FCM or  
6 clearing.

7 I can't recall if Shell does.  
8 So BP definitely, through its clearing, would  
9 have regular communications with the CME.

10 And, you know, it's my  
11 understanding that there are contacts between  
12 many market participants, including big ones  
13 like Shell and BP and the exchange.

14 Q. Are you aware of any  
15 conversations between the CME and these large  
16 traders who had access to -- who have regular  
17 conversations with the CME, are you aware of  
18 any of that on April 20, 2020?

19 A. I'm not aware of any specific  
20 conversation, no.

21 Q. Are you aware of any large  
22 traders who adjusted their trading strategy  
23 based on any warnings from the CME?

24 A. So I'm not aware of that  
25 specifically, no.

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1 Q. You haven't investigated  
2 whether any large trader had access to  
3 storage space and refused to use it, are you?

4 A. So I have not at this time been  
5 able to determine who had the contractual  
6 rights to storage space at Cushing.

7 Q. You haven't asked plaintiffs'  
8 counsel to obtain that information for your  
9 analysis?

10 MR. McGRATH: Object to the  
11 form.

12 A. It's my understanding that that  
13 information has been requested by subpoena,  
14 supplied by plaintiffs' counsel to the  
15 operators of Cushing storage facilities.

16 Q. (By Mr. Taylor) But it's your  
17 opinion that there was sufficient storage  
18 space on April 20, 2020. Correct?

19 A. So my opinion specifically was  
20 that the storage space -- that the available  
21 storage space -- or let's put it this way --  
22 lack of available storage space putatively at  
23 Cushing on April 20 cannot explain the price  
24 movements on that day.

25 Q. In your opinion, it would be